

DATE: Tuesday, December 09, 2003 Printable Copy Create Case

Set Name side by side	Query	Hit Count	Set Name result set		
DB=USPT; PLUR=YES; OP=OR					
<u>L6</u>	pCIS25DTR and L5	3	<u>L6</u>		
<u>L5</u>	L4 and 293S cells	428276	<u>L5</u>		
<u>L4</u>	13 and vector	117377	<u>1.4</u>		
<u>L3</u>	cell line production	2344527	<u>L3</u>		
<u>L2</u>	5952198.pn.	1	<u>L2</u>		
<u>L1</u>	6358703.pn.	1	<u>L1</u>		

END OF SEARCH HISTORY

```
Welcome to STN International! Enter x:x
```

LOGINID:ssspta1653hxp

```
PASSWORD:
```

TERMINAL (ENTER 1, 2, 3, OR ?):2

```
Welcome to STN International
 NEWS 1
                 Web Page URLs for STN Seminar Schedule - N. America
 NEWS 2
                 "Ask CAS" for self-help around the clock
NEWS 3 SEP 09
                 CA/CAplus records now contain indexing from 1907 to the
 NEWS 4 AUG 05 New pricing for EUROPATFULL and PCTFULL effective
                 August 1, 2003
 NEWS 5 AUG 13 Field Availability (/FA) field enhanced in BEILSTEIN
NEWS 6 AUG 18 Data available for download as a PDF in RDISCLOSURE
NEWS 7 AUG 18 Simultaneous left and right truncation added to PASCAL
NEWS 8 AUG 18 FROSTI and KOSMET enhanced with Simultaneous Left and Righ
                 Truncation
NEWS 9 AUG 18 Simultaneous left and right truncation added to ANABSTR
NEWS 10 SEP 22 DIPPR file reloaded
NEWS 11 DEC 08 INPADOC: Legal Status data reloaded
NEWS 12 SEP 29 DISSABS now available on STN
NEWS 13 OCT 10 PCTFULL: Two new display fields added
NEWS 14 OCT 21 BIOSIS file reloaded and enhanced
NEWS 15 OCT 28 BIOSIS file segment of TOXCENTER reloaded and enhanced
NEWS 16 NOV 24 MSDS-CCOHS file reloaded
NEWS 17 DEC 08 CABA reloaded with left truncation
NEWS 18 DEC 08 IMS file names changed
NEWS 19 DEC 09 Experimental property data collected by CAS now available
                 in REGISTRY
NEWS 20 DEC 09 STN Entry Date available for display in REGISTRY and CA/CAplus
NEWS EXPRESS NOVEMBER 14 CURRENT WINDOWS VERSION IS V6.01c, CURRENT
              MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP),
              AND CURRENT DISCOVER FILE IS DATED 23 SEPTEMBER 2003
NEWS HOURS
              STN Operating Hours Plus Help Desk Availability
NEWS INTER
              General Internet Information
NEWS LOGIN
              Welcome Banner and News Items
NEWS PHONE
              Direct Dial and Telecommunication Network Access to STN
NEWS WWW
              CAS World Wide Web Site (general information)
Enter NEWS followed by the item number or name to see news on that
```

specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

* * * * * * * * * * * * STN Columbus

FILE 'HOME' ENTERED AT 13:50:14 ON 09 DEC 2003

=> file medline, uspatful, biosis, dgene, embase, wpids, fsta, jicst, japio, biobusiness, scisearch, hcaplus

SINCE FILE TOTAL ENTRY SESSION

FULL ESTIMATED COST

FILE 'MEDLINE' ENTERED AT 13:50:51 ON 09 DEC 2003

FILE 'USPATFULL' ENTERED AT 13:50:51 ON 09 DEC 2003
CA INDEXING COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'BIOSIS' ENTERED AT 13:50:51 ON 09 DEC 2003 COPYRIGHT (C) 2003 BIOLOGICAL ABSTRACTS INC. (R)

FILE 'DGENE' ENTERED AT 13:50:51 ON 09 DEC 2003 COPYRIGHT (C) 2003 THOMSON DERWENT

FILE 'EMBASE' ENTERED AT 13:50:51 ON 09 DEC 2003 COPYRIGHT (C) 2003 Elsevier Inc. All rights reserved.

FILE 'WPIDS' ENTERED AT 13:50:51 ON 09 DEC 2003 COPYRIGHT (C) 2003 THOMSON DERWENT

FILE 'FSTA' ENTERED AT 13:50:51 ON 09 DEC 2003 COPYRIGHT (C) 2003 International Food Information Service

FILE 'JICST-EPLUS' ENTERED AT 13:50:51 ON 09 DEC 2003 COPYRIGHT (C) 2003 Japan Science and Technology Agency (JST)

FILE 'JAPIO' ENTERED AT 13:50:51 ON 09 DEC 2003 COPYRIGHT (C) 2003 Japanese Patent Office (JPO) - JAPIO

FILE 'BIOBUSINESS' ENTERED AT 13:50:51 ON 09 DEC 2003 COPYRIGHT (C) 2003 Biological Abstracts, Inc. (BIOSIS)

FILE 'SCISEARCH' ENTERED AT 13:50:51 ON 09 DEC 2003 COPYRIGHT 2003 THOMSON ISI

FILE 'HCAPLUS' ENTERED AT 13:50:51 ON 09 DEC 2003 USE IS SUBJECT TO THE TERMS OF YOUR STN. CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)

=> s cell line production 6 FILES SEARCHED... L1 307 CELL LINE PRODUCTION

=> s hkb11 cells

L2 16 HKB11 CELLS

=> s 293S cells

L3 253 293S CELLS

=> s pcis25dtr

L4 7 PCIS25DTR

=> s l1 and l2

L5 0 L1 AND L2

=> s l1 and l3

L6 0 L1 AND L3

=> s l1 and l4

L7 0 L1 AND L4

=> s protein expression

4 FILES SEARCHED...

L8 336750 PROTEIN EXPRESSION

=> s 18 and 12

L9 8 L8 AND L2

=> s 18 and 13

L10 66 L8 AND L3

=> d 19 ti abs ibib tot

L9 ANSWER 1 OF 8 MEDLINE on STN

TI Versatile expression system for rapid and stable production of recombinant proteins.

Previously we reported the development of a novel expression system with AR Tat/TAR-oriP vectors and HKB11 cell line, which supports high level protein expression (Cho et al. Cytotechnology 2001, 37, 23-30). In the present study, we further demonstrated that HKB11 cells are suitable for high throughput expression (microgram scale) of genomic candidates in transient transfection system for in vitro evaluation of biological functions. HKB11 cells were also shown to support the production of milligram to gram quantities of protein drug candidates for in vivo evaluation of efficacy in various disease models. Stable HKB11 clones secreting high levels of a tissue factor (TF; 40-50 pg/c/d) and B-domain deleted recombinant factor VIII (BDDrFVIII; 5-10 microU/c/d) were derived under serum-free conditions. The specific productivity for these two proteins from the HKB11 cells was 10-fold greater than those from CHO cells derived under the similar conditions. In conclusion, we have demonstrated that the HKB11 cell line is well-suited for transient and long-term production of recombinant proteins.

ACCESSION NUMBER: 2003124037 MEDLINE

DOCUMENT NUMBER: 22461258 PubMed ID: 12573030

TITLE: Versatile expression system for rapid and stable production

of recombinant proteins.

AUTHOR: Cho M-S; Yee H; Brown C; Mei B; Mirenda C; Chan S

CORPORATE SOURCE: Molecular and Cell Biology, Process Sciences, Bayer

Biotechnology, 800 Dwight Way, Berkeley, California

94701-1086, USA.

SOURCE: BIOTECHNOLOGY PROGRESS, (2003 Jan-Feb) 19 (1) 229-32.

Journal code: 8506292. ISSN: 8756-7938.

PUB. COUNTRY: United States

DOCUMENT TYPE: (EVALUATION STUDIES)

Journal; Article; (JOURNAL ARTICLE)

(VALIDATION STUDIES)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 200310

ENTRY DATE: Entered STN: 20030318

Last Updated on STN: 20031008

Entered Medline: 20031007

L9 ANSWER 2 OF 8 USPATFULL on STN

TI Enhanced transfection system

AB A mammalian cell gene expression vector system comprising (a) an episomal maintenance system (b), a strong promoter/enhancer, (c) a protein transactivation system and (d) DNA coding for a heterologous protein. The episomal maintenance and protein transactivation systems can include sub-elements located on the same or different plasmids within the cell expression system.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2003:86336 USPATFULL

TITLE: Enhanced transfection system

INVENTOR(S):

Cho, Myung-Sam, Pinole, CA, UNITED STATES Yee, Helena, San Francisco, CA, UNITED STATES

NUMBER KIND DATE

PATENT INFORMATION: APPLICATION INFO.: US 2003059942 A1 20030327 US 2001-956576 Al 20010918 (9)

DOCUMENT TYPE: Utility

APPLICATION FILE SEGMENT:

LEGAL REPRESENTATIVE: Melissa A. Shaw, Senior Patent Counsel, Bayer Corporation, 800 Dwight Way, Berkeley, CA, 94710

NUMBER OF CLAIMS: 21 EXEMPLARY CLAIM:

NUMBER OF DRAWINGS: 7 Drawing Page(s)

LINE COUNT: 611

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 3 OF 8 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN ΤI Versatile expression system for rapid and stable production of recombinant

proteins.

AB Previously we reported the development of a novel expression system with Tat/TAR-oriP vectors and HKB11 cell line, which supports high level protein expression (Cho et al. Cytotechnology 2001, 37, 23-30). In the present study, we further demonstrated that HKB11 cells are suitable for high throughput expression (microgram scale) of genomic candidates in transient transfection system for in vitro evaluation of biological functions. HKB11 cells were also shown to support the production of milligram to gram quantities of protein drug candidates for in vivo evaluation of efficacy in various disease models. Stable HKB11 clones secreting high levels of a tissue factor (TF; 40-50 pg/c/d) and B-domain deleted recombinant factor VIII (BDDrFVIII; 5-10 muU/c/d) were derived under serum-free conditions. The specific productivity for these two proteins from the HKB11 cells was 10-fold greater than those from CHO cells derived under the similar conditions. In conclusion, we have demonstrated that the HKB11 cell line is well-suited for transient and long-term production of recombinant proteins.

ACCESSION NUMBER: 2003:150324 BIOSIS

DOCUMENT NUMBER: PREV200300150324

TITLE: Versatile expression system for rapid and stable production

of recombinant proteins.

Cho, M.-S. [Reprint Author]; Yee, H.; Brown, C.; Mei, B.; AUTHOR (S):

Mirenda, C.; Chan, S.

CORPORATE SOURCE: Molecular and Cell Biology, Process Sciences, Bayer

Biotechnology, 800 Dwight Way, Berkeley, CA, 94701-1086,

USA

SOURCE: Biotechnology Progress, (January-February 2003) Vol. 19,

No. 1, pp. 229-232. print.

CODEN: BIPRET. ISSN: 8756-7938.

DOCUMENT TYPE: Article

English

LANGUAGE:

ENTRY DATE: Entered STN: 19 Mar 2003

Last Updated on STN: 19 Mar 2003

ANSWER 4 OF 8 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN Ъ9 ΤI An oriP expression vector containing the HIV-1 Tat/TAR transactivation

axis produces high levels of protein expression in

mammalian cells.

AB A mammalian gene expression vector based on cytomegalovirus (CMV) enhancer/promoter (CMVe/p) for the regulation of gene expression was further optimized by adding oriP elements derived from Epstein-Barr virus (EBV) and the Tat/TAR transactivation axis from human immunodeficiency virus type 1 (HIV-1). Using the Tat/TAR-oriP expression vector, a transient transfection system was optimized for an extended culture period to produce large amounts of secreted IL-2SA (an IL-2 mutein) in HKB11 cells. We observed a 4-fold increase in IL-2SA expression in cells transfected with vectors containing the HIV-1 transactivation axis (Tat/TAR) or oriP elements alone when compared to cells transfected with the control vector having a CMVe/p. Cells transfected with expression vectors equipped with both oriP and Tat/TAR showed an 18-fold increase in IL-2SA expression. This transient transfection system maintained high secretion of IL-2SA for a period of 10-day with no appreciable loss in expression. We demonstrate that during this 10-day culture period, it was possible to produce 1-100 mg of proteins using 500 mug of plasmid DNA.

ACCESSION NUMBER: 2002:470945 BIOSIS

DOCUMENT NUMBER: PREV200200470945

TITLE: An oriP expression vector containing the HIV-1 Tat/TAR

transactivation axis produces high levels of

protein expression in mammalian cells.

AUTHOR(S): Cho, Myung-Sam [Reprint author]; Yee, Helena; Brown,

Colleen; Jeang, Kuan-Teh; Chan, Sam

CORPORATE SOURCE: Molecular and Cell Biology, Process Sciences,

Biotechnology, Bayer Corporation, Berkeley, CA, USA

myung-sam.cho.b@bayer.com

SOURCE: Cytotechnology, (2001 (2002)) Vol. 37, No. 1, pp. 23-30.

print.

ISSN: 0920-9069.

DOCUMENT TYPE: Article

AB

LANGUAGE: English

ENTRY DATE: Entered STN: 4 Sep 2002

Last Updated on STN: 4 Sep 2002

L9 ANSWER 5 OF 8 SCISEARCH COPYRIGHT 2003 THOMSON ISI on STN

TI Versatile expression system for rapid and stable production of recombinant proteins

Previously we reported the development of a novel expression system with Tat/TAR-oriP vectors and HKB11 cell line, which supports high level protein expression (Cho et al. Cytotechnology 2001, 37, 23-30). In the present study, we further demonstrated that HKB11 cells are suitable for high throughput expression (microgram scale) of genomic candidates in transient transfection system for in vitro evaluation of biological functions. HKB11 cells were also shown to support the production of milligram to gram quantities of protein drug candidates for in vivo evaluation of efficacy in various disease models. Stable HKB11 clones secreting high levels of a tissue factor (TF; 40-50 pg/c/d) and B-domain deleted recombinant factor VIII (BDDrFVIII; 5-10 muU/c/d) were derived under serum-free conditions. The specific productivity for these two proteins from the HKB11 cells was 10-fold greater than those from CHO cells derived under the similar conditions. In conclusion, we have demonstrated that the HKB11 cell line is well-suited for transient and long-term production of recombinant proteins.

ACCESSION NUMBER: 2003:171497 SCISEARCH

THE GENUINE ARTICLE: 645JU

TITLE: Versatile expression system for rapid and stable

production of recombinant proteins

AUTHOR: Cho M S (Reprint); Yee H; Brown C; Mei B; Mirenda C; Chan

5

CORPORATE SOURCE: Bayer Biotechnol, Mol & Cell Biol Proc Sci, 800 Dwight
Way, Berkeley, CA 94701 USA (Reprint); Bayer Biotechnol,

Mol & Cell Biol Proc Sci, Berkeley, CA 94701 USA

COLDWING OF STREET, INC.

COUNTRY OF AUTHOR: USA

SOURCE: BIOTECHNOLOGY PROGRESS, (JAN-FEB 2003) Vol. 19, No. 1, pp.

229-232.

Publisher: AMER CHEMICAL SOC, 1155 16TH ST, NW,

WASHINGTON, DC 20036 USA.

ISSN: 8756-7938.

DOCUMENT TYPE: Article; Journal

LANGUAGE: English

REFERENCE COUNT: 13
ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

L9 ANSWER 6 OF 8 SCISEARCH COPYRIGHT 2003 THOMSON ISI on STN

TI An oriP expression vector containing the HIV-1 Tat/TAR transactivation axis produces high levels of protein expression in mammalian cells

A mammalian gene expression vector based on cytomegalovirus (CMV) AB enhancer/promoter (CMVe/p) for the regulation of gene expression was further optimized by adding oriP elements derived from Epstein-Barr virus (EBV) and the Tat/TAR transactivation axis from human immunodeficiency virus type 1 (HIV-1). Using the Tat/TAR-oriP expression vector, a transient transfection system was optimized for an extended culture period to produce large amounts of secreted IL-2SA (an IL-2 mutein) in HKB11 cells. We observed a 4-fold increase in IL-2SA expression in cells transfected with vectors containing the HIV-1 transactivation axis (Tat/TAR) or oriP elements alone when compared to cells transfected with the control vector having a CMVe/p. Cells transfected with expression vectors equipped with both oriP and Tat/TAR showed an 18-fold increase in IL-2SA expression. This transient transfection system maintained high secretion of IL-2SA for a period of 10-day with no appreciable loss in expression. We demonstrate that during this 10-day culture period, it was possible to produce 1-100 mg of proteins using 500 mug of plasmid DNA.

ACCESSION NUMBER: 2002:588678 SCISEARCH

USA

THE GENUINE ARTICLE: 572FA

TITLE: An oriP expression vector containing the HIV-1 Tat/TAR

transactivation axis produces high levels of

protein expression in mammalian cells

AUTHOR: Cho M S (Reprint); Yee H; Brown C; Jeang K T; Chan S
CORPORATE SOURCE: Bayer Corp, Mol & Cell Biol Proc Sci Biotechnol, Berkeley,

CA USA (Reprint); NIAID, Mol Virol Sect, Mol Microbiol

Lab, NIH, Bethesda, MD 20892 USA

COUNTRY OF AUTHOR:

SOURCE:

CYTOTECHNOLOGY, (JUL-AUG 2001) Vol. 37, No. 1, pp. 23-30. Publisher: KLUWER ACADEMIC PUBL, VAN GODEWIJCKSTRAAT 30,

3311 GZ DORDRECHT, NETHERLANDS.

ISSN: 0920-9069.

Article; Journal

LANGUAGE:

DOCUMENT TYPE:

REFERENCE COUNT:

17

ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

L9 ANSWER: 7 OF 8 HCAPLUS COPYRIGHT 2003 ACS on STN

English

TI Versatile Expression System for Rapid and Stable Production of Recombinant Proteins

Previously we reported the development of a novel expression system with AB Tat/TAR-oriP vectors and HKB11 cell line, which supports high level protein expression (Cho et al. Cytotechnol. 2001, 37, 23-30). In the present study, we further demonstrated that HKB11 cells are suitable for high throughput expression (microgram scale) of genomic candidates in transient transfection system for in vitro evaluation of biol. functions. HKB11 cells were also shown to support the prodn. of milligram to gram quantities of protein drug candidates for in vivo evaluation of efficacy in various disease models. Stable HKB11 clones secreting high levels of a tissue factor (TF; 40-50 pg/c/d) and B-domain deleted recombinant factor VIII (BDDrFVIII; 5-10 .mu.U/c/d) were derived under serum-free conditions. The specific productivity for these two proteins from the HKB11 cells was 10-fold greater than those from CHO cells derived under the similar conditions. In conclusion, we have demonstrated that the HKB11 cell line is well-suited for transient and long-term prodn. of recombinant proteins.

ACCESSION NUMBER:

2002:951572 HCAPLUS

DOCUMENT NUMBER:

138:152354

TITLE:

Versatile Expression System for Rapid and Stable

Production of Recombinant Proteins

AUTHOR (S):

Cho, M.-S.; Yee, H.; Brown, C.; Mei, B.; Mirenda, C.;

Chan, S.

Molecular and Cell Biology, Process Sciences, Bayer

SOURCE:

Biotechnology, Berkeley, CA, 94701-1086, USA

Biotechnology Progress (2003), 19(1), 229-232 CODEN: BIPRET; ISSN: 8756-7938

PUBLISHER:

American Chemical Society

DOCUMENT TYPE:

Journal

LANGUAGE:

REFERENCE COUNT:

CORPORATE SOURCE:

English 13

THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 8 OF 8 HCAPLUS COPYRIGHT 2003 ACS on STN

An oriP expression vector containing the HIV-1 Tat/TAR transactivation axis produces high levels of protein expression in mammalian cells

A mammalian gene expression vector based on cytomegalovirus (CMV) AB enhancer/promoter (CMVe/p) for the regulation of gene expression was further optimized by adding oriP elements derived from Epstein-Barr virus (EBV) and the Tat/TAR transactivation axis from human immunodeficiency virus type 1 (HIV-1). Using the Tat/TAR-oriP expression vector, a transient transfection system was optimized for an extended culture period to produce large amts. of secreted IL-2SA (an IL-2 mutein) in HKB11 cells. The authors obsd. a 4-fold increase in IL-2SA expression in cells transfected with vectors contq. the HIV-1 transactivation axis (Tat/TAR) or oriP elements alone when compared to cells transfected with the control vector having a CMVe/p. Cells transfected with expression vectors equipped with both oriP and Tat/TAR showed an 18-fold increase in IL-2SA expression. This transient transfection system maintained high secretion of IL-2SA for a period of 10-day with no appreciable loss in expression. During this 10-day culture period, it was possible to produce 1-100 mg of proteins using 500 .mu.g of plasmid DNA.

ACCESSION NUMBER:

2002:502219 HCAPLUS

DOCUMENT NUMBER:

138:84087

TITLE:

An oriP expression vector containing the HIV-1 Tat/TAR

transactivation axis produces high levels of

protein expression in mammalian

cells

AUTHOR (S):

Cho, Myung-Sam; Yee, Helena; Brown, Colleen; Jeang, Kuan-Teh; Chan, Sam

CORPORATE SOURCE:

Molecular and Cell Biology, Process Sciences,

Biotechnology, Bayer Corporation, Berkeley, CA, USA

SOURCE:

Cytotechnology (2001), 37(1), 23-30 CODEN: CYTOER; ISSN: 0920-9069

PUBLISHER:

Kluwer Academic Publishers

DOCUMENT TYPE: LANGUAGE:

Journal English

17

REFERENCE COUNT:

THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d his

(FILE 'HOME' ENTERED AT 13:50:14 ON 09 DEC 2003)

FILE 'MEDLINE, USPATFULL, BIOSIS, DGENE, EMBASE, WPIDS, FSTA, JICST-EPLUS, JAPIO, BIOBUSINESS, SCISEARCH, HCAPLUS' ENTERED AT 13:50:51 ON 09 DEC 2003

```
16 S HKB11 CELLS
L3
            253 S 293S CELLS
             7 S PCIS25DTR
L5
             0 S L1 AND L2
L6
             0 S L1 AND L3
             0 S L1 AND L4
L7
L8
         336750 S PROTEIN EXPRESSION
1.9
             8 S L8 AND L2
             66 S L8 AND L3
L10
=> d l10 and l4
L4 IS NOT VALID HERE
For an explanation, enter "HELP DISPLAY".
=> s 110 and 14
L11
            1 L10 AND L4
=> d lll ti abs ibib tot
L11 ANSWER 1 OF 1 USPATFULL on STN
       Vectors having terminal repeat sequence of Epstein-Barr virus
AΒ
       The use of a unique terminal repeat sequence derived from Epstein-Barr
      virus to improve the integration frequency of heterologous expression
       vectors in transfected cells is described. The vectors can be used in a
      process for deriving high producing cell lines.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER:
                        2001:13966 USPATFULL
                        Vectors having terminal repeat sequence of Epstein-Barr
TITLE:
                        virus
INVENTOR (S):
                        Cho, Myung-Sam, Pinole, CA, United States
                        Chan, Sham-Yuen, El Sobrante, CA, United States
PATENT ASSIGNEE (S):
                        Bayer Corporation, Pittsburgh, PA, United States (U.S.
                        corporation)
                             NUMBER
                                      KIND
                                                 DATE
                       US 6180108 B1 20010130
PATENT INFORMATION:
                       US 1998-209915
                                               19981210 (9)
APPLICATION INFO.:
DOCUMENT TYPE:
                       Utility
FILE SEGMENT:
                       Granted
                       Salimi, Ali R.
PRIMARY EXAMINER:
NUMBER OF CLAIMS:
EXEMPLARY CLAIM:
                       1,3
NUMBER OF DRAWINGS:
                      3 Drawing Figure(s); 3 Drawing Page(s)
LINE COUNT:
                       310
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
=> d his
     (FILE 'HOME' ENTERED AT 13:50:14 ON 09 DEC 2003)
     FILE 'MEDLINE, USPATFULL, BIOSIS, DGENE, EMBASE, WPIDS, FSTA,
     JICST-EPLUS, JAPIO, BIOBUSINESS, SCISEARCH, HCAPLUS' ENTERED AT 13:50:51
     ON 09 DEC 2003
L1
           307 S CELL LINE PRODUCTION
L2
            16 S HKB11 CELLS
L3
            253 S 293S CELLS
             7 S PCIS25DTR
L4
```

L5

L6

Ь7 Ь8 0 S L1 AND L2 0 S L1 AND L3

0 S L1 AND L4

336750 S PROTEIN EXPRESSION

L9 8 S L8 AND L2 L10 66 S L8 AND L3 L11 1 S L10 AND L4

=> s l1 and human

8 FILES SEARCHED...

L12 104 L1 AND HUMAN

=> s 112 and 18

L13 17 L12 AND L8

=> s 113 and 13

L14 0 L13 AND L3

=> s 113 and 12

L15 0 L13 AND L2

=> s 113 and 14

ΤI

AB

L16 0 L13 AND L4

=> d 113 ti abs ibib tot

L13 ANSWER 1 OF 17 USPATFULL on STN

Lentiviral vector particles resistant to complement inactivation The present invention provides a retroviral gene delivery system that resists complement inactivation through the incorporation of a complement regulatory protein into retroviral particles. In particular, the present invention provides a lentiviral packaging system comprising at least two vectors: a first vector which comprises a nucleotide sequence comprising a gag, a pol, or gag and pol genes; and a second vector which comprises a nucleotide sequence comprising a gene that encodes a complement regulatory protein (CRP) and, optionally, a gene that encodes a heterologous or functionally modified envelope protein. The genes encoding a heterologous or functionally modified envelope protein and a CRP are provided either together in a second nucleotide sequence, or separately in second and third nucleotide sequences. Producer cells comprising the packaging constructs of the present invention and a transgene can be used to produce recombinant retroviral particles for transgene delivery.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2003:294430 USPATFULL

TITLE: Lentiviral vector particles resistant to complement

inactivation

INVENTOR(S): Schauber, Cherylene A., San Francisco, CA, UNITED

STATES

Pacheco, Christopher D., Ann Arbor, MI, UNITED STATES

PATENT ASSIGNEE(S): CELL GENESYS, INC. (U.S. corporation)

NUMBER KIND DATE

PATENT INFORMATION: APPLICATION INFO.: US 2003207445 A1 20031106 US 2003-425323 A1 20030429 (10)

NUMBER DATE

PRIORITY INFORMATION:

US 2002-376767P 20020501 (60) Utility

DOCUMENT TYPE: FILE SEGMENT:

T: APPLICATION

THE SEGMENT: APPLICATION OF THE PROPERTY OF TH

LEGAL REPRESENTATIVE: Karen S. Canady, Esq., Gates & Cooper LLP, Howard Hughes Center, 6701 Center Drive West, Suite 1050, Los

Angeles, CA, 90045

NUMBER OF CLAIMS:

-

EXEMPLARY CLAIM:

3 Drawing Page(s) NUMBER OF DRAWINGS:

LINE COUNT: 1600

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 2 OF 17 USPATFULL on STN

ΤI Pseudotyped retroviral vectors

AB The present invention provides pseudotyped retroviral vectors and packaging systems and methods of using such vectors for

retroviral-mediated gene transfer. In particular, the present invention provides a retroviral packaging system that comprises at least two vectors: a first vector comprising a gag, a pol, or gag and pol genes; and a second vector comprising a functionally modified or heterologous envelope gene, for example, a baculovirus envelope gene.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2003:294423 USPATFULL

Pseudotyped retroviral vectors

TITLE: INVENTOR (S):

Schauber, Cherylene Oas, San Francisco, CA, UNITED STATES

Pacheco, Christopher D., Ann Arbor, MI, UNITED STATES

PATENT ASSIGNEE(S): CELL GENESYS, INC. (U.S. corporation)

> NUMBER KIND DATE -----

PATENT INFORMATION: US 2003207438 A1 20031106 APPLICATION INFO:: US 2003-425324 A1 20030429 (10)

NUMBER DATE

PRIORITY INFORMATION: US 2002-376708P 20020501 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: Karen S. Canady, Esq., Gates & Cooper LLP, Howard

Hughes Center, 6701 Center Drive West, Suite 1050, Los

Angeles, CA, 90045

NUMBER OF CLAIMS: EXEMPLARY CLAIM:

26

2424

NUMBER OF DRAWINGS: 7 Drawing Page(s)

LINE COUNT:

AΒ

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 3 OF 17 USPATFULL on STN

Host cells containing multiple integrating vectors тT

The present invention relates to the production of proteins in host cells, and more particularly to host cells containing multiple integrated copies of an integrating vector. Suitable integrating vectors for use in the present invention include retrovirus vectors, lentivirus vectors, transposon vectors, and adeno-associated virus vectors. Methods are provided in which the host cells are prepared by using the integrating vectors at a high multiplicity of infection. The host cells are useful for producing pharmaceutical proteins, variants of proteins for use in screening assays, and for direct use in high throughput screening.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2003:134793 USPATFULL

TITLE: Host cells containing multiple integrating vectors

INVENTOR (S): Bremel, Robert D., Hillpoint, WI, UNITED STATES

Miller, Linda U., Lodi, WI, UNITED STATES Bleck, Gregory T., Baraboo, WI, UNITED STATES

NUMBER KIND DATE -----

PATENT INFORMATION: US 2003092882 A1 20030515

APPLICATION INFO.: US 2001-897511 A1 20010629 (9)

NUMBER DATE

PRIORITY INFORMATION: US 2000-215925P 20000703 (60)

5628

DOCUMENT TYPE: Utility

FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: MEDLEN & CARROLL, LLP, 101 HOWARD STREET, SUITE 350,

SAN FRANCISCO, CA, 94105

NUMBER OF CLAIMS: 102 EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 35 Drawing Page(s)

LINE COUNT:

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 4 OF 17 USPATFULL on STN

TI Lentiviral vectors encoding clotting factors for gene therapy

AB Recombinant lentiviruses and transfer vectors for transgene delivery as well as methods for gene therapy using such vectors are disclosed. The invention provides a third generation lentiviral packaging system and a set of vectors for producing recombinant lentiviruses, as well as novel tissue specific enhancer and promoter elements useful for optimizing liver specific transgene delivery. The transgene is preferably a blood clotting factor such as human factor IX (hFIX) or

human factor VIII (hFVIII) and can be used for treatment of hemophilia.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2003:113079 USPATFULL

TITLE: Lentiviral vectors encoding clotting factors for gene

therapy

INVENTOR(S): McArthur, James G., San Carlos, CA, UNITED STATES
Talbot, Dale John, San Francisco, CA, UNITED STATES

Simmons, Andrew D., San Mateo, CA, UNITED STATES Simmons, Andrew D., San Mateo, CA, UNITED STATES McGuinness, Ryan, Oakland, CA, UNITED STATES Kelly, Michael, Carlsbad, CA, UNITED STATES Tsui, Lisa V., Mountain View, CA, UNITED STATES Dull, Thomas, San Francisco, CA, UNITED STATES

.....

NUMBER DATE

PRIORITY INFORMATION: US 2001-291083P 20010514 (60)

DOCUMENT TYPE: Utility

FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: GATES & COOPER LLP, HOWARD HUGHES CENTER, 6701 CENTER

DRIVE WEST, SUITE 1050, LOS ANGELES, CA, 90045

NUMBER OF CLAIMS: 33

EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 9 Drawing Page(s) LINE COUNT: 1615

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 5 OF 17 USPATFULL on STN

TI Implantable biocompatible immunoisolatory vehicle for delivery of

selected therapeutic products

AB An immunoisolatory vehicle for the implantation into an individual of cells which produce a needed product or provide a needed metabolic function. The vehicle is comprised of a core region containing isolated cells and materials sufficient to maintain the cells, and a

permselective, biocompatible, peripheral region free of the isolated cells, which immunoisolates the core yet provides for the delivery of the secreted product or metabolic function to the individual. The vehicle is particularly well-suited to delivery of insulin from immunoisolated islets of Langerhans, and can also be used advantageously for delivery of high molecular weight products, such as products larger than IgG. A method of making a biocompatible, immunoisolatory implantable vehicle, consisting in a first embodiment of a coextrusion process, and in a second embodiment of a stepwise process. A method for isolating cells within a biocompatible, immunoisolatory implantable vehicle, which protects the isolated cells from attack by the immune system of an individual in whom the vehicle is implanted. A method of providing a needed biological product or metabolic function to an individual, comprising implanting into the individual an immunoisolatory vehicle containing isolated cells which produce the product or provide the metabolic function.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:

INVENTOR (S):

2002:272488 USPATFULL

TITLE:

Implantable biocompatible immunoisolatory vehicle for

delivery of selected therapeutic products

Dionne, Keith E., Rehoboth, MA, UNITED STATES Emerich, Dwaine F., Providence, RI, UNITED STATES Hoffman, Diane, Cambridge, MA, UNITED STATES

Sanberg, Paul R., Spring Hill, FL, UNITED STATES Christenson, Lisa, New Haven, CT, UNITED STATES Hegre, Orion D., Green Valley, AZ, UNITED STATES

Scharp, David W., St. Louis, MO, UNITED STATES Lacy, Paul E., Webster Grove, MO, UNITED STATES

Aebischer, Patrick, Lutry, SWITZERLAND

Vasconcellos, Alfred V., Cranston, RI, UNITED STATES Lysaght, Michael J., E. Greenwich, RI, UNITED STATES Gentile, Frank T., Warwich, RI, UNITED STATES

NUMBER KIND DATE

PATENT INFORMATION: APPLICATION INFO.: RELATED APPLN. INFO.: US 2002150603 A1 20021017 US 2001-7344 A1 20011025 Continuation of Ser. No. US 2000-563248, filed on 2 May

2000, GRANTED, Pat. No. US 6322804 Division of Ser. No. US 1998-148671, filed on 4 Sep 1998, GRANTED, Pat. No. US 6083523 Division of Ser. No. US 1995-449837, filed on 24 May 1995, GRANTED, Pat. No. US 5874099 Division of Ser. No. US 1994-179151, filed on 10 Jan 1994, GRANTED, Pat. No. US 5800828 Continuation-in-part of Ser. No. WO 1992-US3327, filed on 22 Apr 1992, UNKNOWN Continuation-in-part of Ser. No. US 1991-692403, filed

on 25 Apr 1991, ABANDONED

DOCUMENT TYPE: FILE SEGMENT:

Utility APPLICATION

LEGAL REPRESENTATIVE: MINTZ LEVIN, One Financial Center, Boston, MA, 02111

NUMBER OF CLAIMS: EXEMPLARY CLAIM:

NUMBER OF DRAWINGS:

9 Drawing Page(s)

LINE COUNT:

3733

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 6 OF 17 USPATFULL on STN

TΙ Implantable biocompatible immunoisolatory vehicle for the delivery of selected therapeutic products

AΒ An immunoisolatory vehicle for the implantation into an individual of cells which produce a needed product or provide a needed metabolic function. The vehicle is comprised of a core region containing isolated cells and materials sufficient to maintain the cells, and a

permselective, biocompatible, peripheral region free of the isolated cells, which immunoisolates the core yet provides for the delivery of the secreted product or metabolic function to the individual.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2001:214673 USPATFULL

TITLE: Implantable biocompatible immunoisolatory vehicle for

the delivery of selected therapeutic products
INVENTOR(S): Dionne, Keith E., Rehoboth, MA, United States

Emerich, Dwaine F., Providence, RI, United States
Hoffman, Diane, Cambridge, MA, United States
Sanberg, Paul R., Spring Hill, FL, United States
Christenson, Lisa, New Haven, CT, United States
Hegre, Orion D., Green Valley, AZ, United States
Scharp, David W., St. Louis, MO, United States

Lacy, Paul E., Webster Grove, MO, United States

Aebischer, Patrick, Lutry, Switzerland

Vasconcellos, Alfred V., Cranston, RI, United States Lysaght, Michael J., E. Greenwich, RI, United States

Gentile, Frank T., Warwich, RI, United States
PATENT ASSIGNEE(S): Neurotech S.A., Evry, France (non-U.S. corporation)

NUMBER KIND DATE

PATENT INFORMATION: US 6322804 B1 20011127 APPLICATION INFO.: US 2000-563248 20000502 (9)

RELATED APPLN. INFO.: Division of Ser. No. US 1998-148671, filed on 4 Sep 1998, now patented, Pat. No. US 6083523 Division of Ser. No. US 1995-449837, filed on 24 May 1995, now

patented, Pat. No. US 5874099 Division of Ser. No. US 179151, now patented, Pat. No. US 5800828 Continuation-in-part of Ser. No. US 1991-692403, filed

on 25 Apr 1991, now abandoned

DOCUMENT TYPE: Utility FILE SEGMENT: GRANTED

PRIMARY EXAMINER: Bawa, Raj

LEGAL REPRESENTATIVE: Mintz, Levin, Cohn, Ferris, Glovsky and Pope, P.C.,

Elrifi, Ivor R., Karnakis, Christina V.

NUMBER OF CLAIMS: EXEMPLARY CLAIM:

- -

3794

NUMBER OF DRAWINGS:

15 Drawing Figure(s); 9 Drawing Page(s)

LINE COUNT:

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 7 OF 17 USPATFULL on STN

TI Implantable biocompatable immunoisolatory vehicle for delivery of

selected therapeutic products

AB An immunoisolatory vehicle for the implantation into an individual of cells which produce a needed product or provide a needed metabolic function. The vehicle is comprised of a core region containing isolated cells and materials sufficient to maintain the cells, and a permselective, biocompatible, peripheral region free of the isolated cells, which immunoisolates the core yet provides for the delivery of the secreted product or metabolic function to the individual.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2000:8

: 2000:83864 USPATFULL

TITLE: Implantable biocompatable immunoisolatory vehicle for

delivery of selected therapeutic products
INVENTOR(S): Dionne, Keith E., Rehoboth, MA, United States

Emerich, Dwaine F., Providence, RI, United States Hoffman, Diane, Cambridge, MA, United States Sanberg, Paul R., Spring Hill, FL, United States Christenson, Lisa, New Haven, CT, United States Hegre, Orion D., Green Valley, AZ, United States Scharp, David W., St. Louis, MO, United States Lacy, Paul E., Webster Grove, MO, United States Aebischer, Patrick, Lutry, Switzerland

Vasconcellos, Alfred V., Cranston, RI, United States Lysaght, Michael J., Greenwich, RI, United States

Gentile, Frank T., Warwich, RI, United States

PATENT ASSIGNEE(S): Brown University Research Foundation, Providence, RI,

United States (U.S. corporation)

Brown University, Providence, RI, United States (U.S. corporation)

NUMBER KIND DATE

PATENT INFORMATION:

APPLICATION INFO.:

US 6083523 20000704 US 1998-148671 19980904 19980904 (9)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1995-449837, filed on 24 May 1995, now patented, Pat. No. US 5874099 And a continuation-in-part of Ser. No. WO 1992-US3327, filed on 22 Apr 1992 which is a continuation-in-part of Ser.

No. US 1991-692403, filed on 25 Apr 1991

DOCUMENT TYPE:

Utility Granted

FILE SEGMENT: PRIMARY EXAMINER:

Azpuru, Carlos A.

LEGAL REPRESENTATIVE: Mintz, Levin, Cohn, Ferris Glovsky and Popeo, P.C.,

Elrifi, Ivor R., Prince, John

NUMBER OF CLAIMS:

EXEMPLARY CLAIM:

15 Drawing Figure(s); 9 Drawing Page(s)

NUMBER OF DRAWINGS: LINE COUNT:

3880

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 8 OF 17 USPATFULL on STN

TI Promiscuous G-protein compositions and their use

AΒ Disclosed are compositions and methods for their use, such as in identifying G-protein coupled receptors and ligands and compounds that modulate signal transduction. The compositions and methods employ promicuous G-proteins. Activation of the promiscous G-protein can be detected in a variety of assays, including assays in which activation is indicated by a change in fluorescence emission of a sample that contains the composition.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:

1999:166849 USPATFULL

TITLE: INVENTOR(S): Promiscuous G-protein compositions and their use Negulescu, Paul, Solana Beach, CA, United States

Offermanns, Stefan, Berlin, Germany, Federal Republic

Simon, Melvin, San Marino, CA, United States Zuker, Charles, San Diego, CA, United States

PATENT ASSIGNEE(S):

Aurora BioSciences Corporation, San Diego, CA, United

States (U.S. corporation)

NUMBER KIND DATE

PATENT INFORMATION: APPLICATION INFO.:

US 6004808 19991221 US 1997-878801 19970619 (8)

NUMBER DATE

-----PRIORITY INFORMATION: US 1996-20234P 19960621 (60)

DOCUMENT TYPE: FILE SEGMENT:

Utility Granted

PRIMARY EXAMINER:

Achutamurthy, Ponnathapu

ASSISTANT EXAMINER: Mayhew, Bradley S.

LEGAL REPRESENTATIVE: Gary Cary Ware & Freidenrich LLP, Haile, Lisa A.

NUMBER OF CLAIMS: 27 EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 16 Drawing Figure(s); 8 Drawing Page(s)

LINE COUNT: 2021

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 9 OF 17 USPATFULL on STN

TI Recombinant DNA molecules and expression vectors for tissue plasminogen

activator

AB A recombinant DNA molecule adapted for transfection of a host cell comprising a nucleic acid molecule encoding mammalian erythropoietin or tissue plasminogen activator, an expression control sequence operatively linked thereto and at least one SAR element. The invention also relates to expression vectors having the recombinant DNA molecule and to mammalian cells transformed with the expression vector. The mammalian cells lack multiple copies of an amplified amplification gene and are capable of expressing recombinant EPO or tPA in vitro at levels of at least 1,500 u or 500 u/10.sup.6 cells in 24 hours respectively. The invention further relates to a method of expressing recombinant mammalian EPO or tPA using the expression vectors and to a transgenic non-human animal or embryo whose germ cells and somatic cells contain a DNA construct having the recombinant DNA molecule of the invention.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 1999:146307 USPATFULL

TITLE: Recombinant DNA molecules and expression vectors for

tissue plasminogen activator

INVENTOR(S): Delcuve, Genevieve, Winnipeg, Canada

Awang, Gregor, Winnipeg, Canada

PATENT ASSIGNEE(S): Cangene Corporation, Winnipeg, Canada (non-U.S.

corporation)

NUMBER KIND DATE

PATENT INFORMATION: US 5985607 19991116
APPLICATION INFO.: US 1997-883795 19970627 (8)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1994-358918, filed

on 19 Dec 1994, now patented, Pat. No. US 5888774

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Degen, Nancy

ASSISTANT EXAMINER: Schwartzman, Robert

LEGAL REPRESENTATIVE: Bereskin & Parr

NUMBER OF CLAIMS: 19 EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 11 Drawing Figure(s); 13 Drawing Page(s)

LINE COUNT: 2686

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 10 OF 17 USPATFULL on STN

TI Methods for making immunoisolatary implantable vehicles with a

biocompatible jacket and a biocompatible matrix core

As a method of forming an implantable and retrievable in

AB A method of forming an implantable and retrievable immunoisolatory vehicles is disclosed, the method comprising the steps of first forming a core comprising a volume of at least 1 .mu.l and at least 10.sup.4 cells capable of providing a biologically active product or metabolic or immunologic function, said cells being dispersed in a biocompatible hydrogel or extracellular matrix, and then forming around the core a surrounding external biocompatible thermoplastic or hydrogel jacket free of said cells projecting externally thereof, said jacket having molecular weight cutoff permitting passage of molecules to and from the

core through said jacket to provide said biologically active product or function.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 1999:24325 USPATFULL

TITLE: Methods for making immunoisolatary implantable vehicles

with a biocompatible jacket and a biocompatible matrix

core

INVENTOR(S): Dionne, Keith E., Rehoboth, MA, United States

Emerich, Dwaine F., Providence, RI, United States Hoffman, Diane, Cambridge, MA, United States Sanberg, Paul R., Spring Hill, FL, United States Christenson, Lisa, New Haven, CT, United States Hegre, Orion D., Green Valley, AZ, United States Scharp, David W., St. Louis, MO, United States Lacy, Paul E., Webster Grove, MO, United States

Aebischer, Patrick, Lutry, Switzerland

Vasoohcellos, Alfred V., Cranston, RI, United States Lysaght, Michael J., E. Greenwich, RI, United States

Gentile, Frank T., Warwich, RI, United States

PATENT ASSIGNEE(S): Brown University Research Foundation, United States

(U.S. corporation)

NUMBER KIND DATE

PATENT INFORMATION: US 5874099 19990223 APPLICATION INFO.: US 1995-449837 19950524 (8)

RELATED APPLN. INFO.: Division of Ser. No. US 1994-179151, filed on 10 Jan 1994 which is a continuation-in-part of Ser. No. US

1991-692403, filed on 25 Apr 1991, now abandoned

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Bawa, Raj

LEGAL REPRESENTATIVE: Elrifi, Ivor R.Mitz, Levin

NUMBER OF CLAIMS: 28

EXEMPLARY CLAIM: 3

NUMBER OF DRAWINGS: 15 Drawing Figure(s); 9 Drawing Page(s)

LINE COUNT: 3879

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 11 OF 17 USPATFULL on STN

TI Methods for treatment or prevention of neurodegenerative conditions using immunoisolatory implantable vehicles with a biocompatible jacket and a biocompatible matrix core

Amethod for treatment of a neurodegenerative condition in a patient comprising implanting in the patient at least one immunoisolatory vehicle comprising a core comprising a volume of at least 1 mu.l and at least 10.sup.4 living cells which secrete at least one biologically active product, said cells being dispersed in a biocompatible matrix comprising a hydrogel or extracellular matrix components, and an external jacket surrounding the core, the jacket comprising a biocompatible hydrogel or thermoplastic, the jacket being free of cells projecting externally thereof, said jacket having a molecular weight cutoff permitting the passage of the biologically active product from the core through the jacket.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 1999:21753 USPATFULL

TITLE: Methods for treatment or prevention of

neurodegenerative conditions using immunoisolatory implantable vehicles with a biocompatible jacket and a

biocompatible matrix core

INVENTOR(S): Dionne, Keith E., Rehoboth, MA, United States
Emerich, Dwaine F., Providence, RI, United States

Hoffman, Diane, Cambridge, MA, United States Sanberg, Paul R., Spring Hill, FL, United States Christenson, Lisa, New Haven, CT, United States Hegre, Orion D., Green Valley, AZ, United States Scharp, David W., St. Louis, MO, United States Lacy, Paul E., Webster Grove, MO, United States Aebischer, Patrick, Lutry, Switzerland Vasconcellos, Alfred V., Cranston, RI, United States Lysaght, Michael J., E. Greenwich, RI, United States Gentile, Frank T., Warwich, RI, United States

PATENT ASSIGNEE(S):

Brown University Research Foundation, United States

(U.S. corporation)

NUMBER KIND DATE ______

PATENT INFORMATION: APPLICATION INFO.:

US 5871767 US 1995-449062 19990216 19950524 (8)

RELATED APPLN. INFO.: Division of Ser. No. US 1994-179151, filed on 10 Jan 1994 which is a continuation-in-part of Ser. No. US 1991-692403, filed on 25 Apr 1991, now abandoned Utility

DOCUMENT TYPE: FILE SEGMENT: PRIMARY EXAMINER:

Granted Bawa, Raj

LEGAL REPRESENTATIVE: Ekrufu, Ivor R.Mintz, Levin

NUMBER OF CLAIMS: 45 EXEMPLARY CLAIM: NUMBER OF DRAWINGS:

1. 15 Drawing Figure(s); 9 Drawing Page(s)

LINE COUNT:

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 12 OF 17 USPATFULL on STN

TI Methods for treating diabetes by delivering insulin from biocompatible cell-containing devices

AB A method for treating diabetes in a patient comprising subcutaneously implanting in the patient at least one immunoisolatory vehicle comprising a core comprising a volume of at least 1 .mu.l and at least about 10.sup.4 living cells which secrete insulin, said cells being dispersed in a biocompatible matrix comprising a hydrogel or extracellular matrix components, and a surrounding external jacket of a biocompatible thermoplastic or hydrogel free of said cells projecting externally thereof, said jacket being permselective and immunoisolatory, said jacket having a molecular weight cutoff permitting passage of molecules between the patient and core through said jacket wherein the insulin is released from the immunoisolatory vehicle into the patient's body to treat diabetes.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: TITLE:

1999:18748 USPATFULL

INVENTOR (S):

Methods for treating diabetes by delivering insulin from biocompatible cell-containing devices Dionne, Keith E., Rehoboth, MA, United States Emerich, Dwaine F., Providence, RI, United States Hoffman, Diane, Cambridge, MA, United States Sanberg, Paul R., Spring Hill, FL, United States Christenson, Lisa, New Haven, CT, United States Hegre, Orion D., Green Valley, AZ, United States Scharp, David W., St. Louis, MO, United States Lacy, Paul E., Webster Grove, MO, United States Aebischer, Patrick, Lutry, Switzerland

Vasconcellos, Alfred V., Cranston, RI, United States Lysaght, Michael J., Greenwich, RI, United States Gentile, Frank T., Warwich, RI, United States

PATENT ASSIGNEE(S):

Brown University Research Foundation, United States

(U.S. corporation)

NUMBER KIND DATE

PATENT INFORMATION: US 5869077 19990209
APPLICATION INFO:: US 1995-449562 19950524 (8)

RELATED APPLN. INFO.: Division of Ser. No. US 1994-179151, filed on 10 Jan 1994 which is a continuation-in-part of Ser. No. US

1991-692403, filed on 25 Apr 1991, now abandoned

DOCUMENT TYPE: Utility FILE SEGMENT: Granted

PRIMARY EXAMINER: Bawa, Raj

LEGAL REPRESENTATIVE: Elrifi, Ivor R.Mintz, Levin

NUMBER OF CLAIMS: 13 EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 15 Drawing Figure(s); 9 Drawing Page(s)

LINE COUNT: 3813

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 13 OF 17 USPATFULL on STN

TI Methods for making immunoisolatory implantable vehicles with a

biocompatiable jacket and a biocompatible matrix core

AB A method of forming an implantable and retrievable immunoisolatory vehicle is disclosed, the method comprising the steps of first forming a jacket of biocompatible thermoplastic or hydrogel, and then loading the jacket with a core comprising a volume of at least 1 .mu.l and at least 10.sup.4 cells capable of secreting a biocompatible matrix comprising a hydrogel or extracellular matrix, said jacket having a molecular weight cutoff permitting passage of molecules thereacross to provide said biologically active product or said function.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 1998:138453 USPATFULL

TITLE: Methods for making immunoisolatory implantable vehicles

with a biocompatiable jacket and a biocompatible matrix core

INVENTOR(S): Dionne, Keith E., Rehoboth, MA, United States

Emerich, Dwaine F., Providence, RI, United States Hoffman, Diane, Cambridge, MA, United States Sanberg, Paul R., Spring Hill, FL, United States Christenson, Lisa, New Haven, CT, United States Hegre, Orion D., Green Valley, AZ, United States Sharp, David W., St. Louis, MO, United States Lacy, Paul E., Webster Grove, MO, United States

Aebischer, Patrick, Lutry, Switzerland

Vasconcellos, Alfred V., Cranston, RI, United States Lysaght, Michael J., Greenwich, RI, United States Gentile, Frank T., Warwich, RI, United States

PATENT ASSIGNEE(S): Brown University Research Foundation, United States

(U.S. corporation)

NUMBER KIND DATE

PATENT INFORMATION: US 5834001 19981110 APPLICATION INFO.: US 1995-449214 19950524

RELATED APPLN. INFO.: Division of Ser. No. US 1994-179151, filed on 10 Jan 1994 which is a continuation-in-part of Ser. No. US

1991-692403, filed on 25 Apr 1991, now abandoned

(8)

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Bawa, Raj

LEGAL REPRESENTATIVE: Ivor Elrifi Mintz, Levin

NUMBER OF CLAIMS: 25 EXEMPLARY CLAIM: 5

NUMBER OF DRAWINGS: 15 Drawing Figure(s); 9 Drawing Page(s)

LINE COUNT: 3844

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 14 OF 17 USPATFULL on STN

Methods for coextruding immunoisolatory implantable vehicles with a

biocompatible jacket and a biocompatible matrix core

AB A method of making an immunoisolatory vehicle comprised of a core comprising living cells dispersed in a biocompatible matrix is disclosed, the cells being capable of secreting a biologically active product or of providing a metabolic or immunologic function to an individual, and an external jacket surrounding said core which is a biocompatible, permselective thermoplastic or hydrogel, said jacket being free of said cells, comprising coextruding a suspension comprising said cells dispersed in a precursor matrix material comprising extracellular matrix components or a biocompatible hydrogel precursor, and a solution of a biocompatible jacket precursor from a nested dual-bore extrusion nozzle, wherein the suspension of (a) is coextruded from the inner bore and the solution of (b) is coextruded from the outer bore of the nozzle, to form said jacket as the solution of (b) and the suspension of (a) arc coextruded; and exposing the vehicle to a treatment that forms a core comprising a volume of at least 1 .mu.l and at least 10.sup.4 cells and comprising a biocompatible matrix from the precursor matrix of solution (a).

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 1998:104405 USPATFULL

TITLE: Methods for coextruding imm

Methods for coextruding immunoisolatory implantable

vehicles with a biocompatible jacket and a

biocompatible matrix core
INVENTOR(S): Dionne, Keith E., Rehoboth, MA, United States

Dionne, Keith E., Renoboth, MA, United States Emerich, Dwaine F., Providence, RI, United States Hoffman, Diane, Cambridge, MA, United States Sanberg, Paul R., Spring Hill, FL, United States Christenson, Lisa, New Haven, CT, United States Hegre, Orion D., Green Valley, AZ, United States Scharp, David W., St. Louis, MO, United States Lacy, Paul E., Webster Grove, MO, United States

Aebischer, Patrick, Lutry, Switzerland

Vasconcellos, Alfred V., Cranston, RI, United States Lysaght, Michael J., E. Greenwich, RI, United States

Gentile, Frank T., Warwich, RI, United States

PATENT ASSIGNEE(S): Brown University Research Foundation, United States

(U.S. corporation)

NUMBER KIND DATE

PATENT INFORMATION: US 5800829 19980901 APPLICATION INFO.: US 1995-449274 19950524 (8)

RELATED APPLN. INFO.: Division of Ser. No. US 1994-179151, filed on 10 Jan

1994 which is a continuation-in-part of Ser. No. US 1991-693403, filed on 25 Apr 1991, now abandoned

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Bawa, Raj

LEGAL REPRESENTATIVE: Elrifi, Ivor R.Mintz, Levin

NUMBER OF CLAIMS: 27 EXEMPLARY CLAIM: 6

NUMBER OF DRAWINGS: 15 Drawing Figure(s); 9 Drawing Page(s)

LINE COUNT: 3898

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 15 OF 17 USPATFULL on STN

TI Implantable biocompatible immunoisolatory vehicle for delivery of selected therapeutic products

Immunoisolatory vehicles having a core and a surrounding jacket are AΒ disclosed, the core having a volume in excess of 1 .mu.l and at least about 10.sup.4 living cells capable of secreting a biologically active product or of providing a biological function to a patient, the cells dispersed in a biocompatible matrix formed of a hydrogel or an extracellular matrix component, and the external jacket being permselective, biocompatible and having a molecular weight cutoff permitting passage of molecules between the patient and the core through said jacket to provide said biological product or function.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 1998:104404 USPATFULL

Implantable biocompatible immunoisolatory vehicle for TITLE:

delivery of selected therapeutic products

INVENTOR(S): Dionne, Keith E., Rehoboth, MA, United States Emerich, Dwaine F., Providence, RI, United States Hoffman, Diane, Cambridge, MA, United States Sanberg, Paul R., Spring Hill, FL, United States Christenson, Lisa, New Haven, CT, United States Hegre, Orion D., Green Valley, AZ, United States

Scharp, David W., St. Louis, MO, United States Lacy, Paul E., Webster Grove, MO, United States Aebischer, Patrick, Lutry, Switzerland

Vasconcellos, Alfred V., Cranston, RI, United States Lysaght, Michael J., E. Greenwich, RI, United States

Gentile, Frank T., Warwich, RI, United States

Brown University Research Foundation, United States PATENT ASSIGNEE(S):

(U.S. corporation)

NUMBER KIND DATE

PATENT INFORMATION: US 5800828 19980901 APPLICATION INFO.: US 1994-179151 19940110 (8)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1991-692403, filed

on 25 Apr 1991, now abandoned

DOCUMENT TYPE: Utility FILE SEGMENT: Granted PRIMARY EXAMINER: Bawa, Raj

LEGAL REPRESENTATIVE: Elrifi, Ivor R.Mintz, Levin

NUMBER OF CLAIMS: 43

EXEMPLARY CLAIM:

NUMBER OF DRAWINGS: 15 Drawing Figure(s); 9 Drawing Page(s)

LINE COUNT: 3914

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 16 OF 17 USPATFULL on STN

Implantable biocompatible immunoisolatory vehicle for delivery of TT selected therapeutic products

A method of providing a biologically active molecule or metabolic or AB immunologic function to a patient, comprising implanting into the body of the patient at least one immunoisolatory vehicle comprising a core comprising a volume in excess of 1 .mu.l and at least about 10.sup.4 living cells dispersed in a biocompatible matrix formed of a hydrogel or extracellular matrix components, said cells being capable of secreting a biologically active product or of providing a metabolic or immunologic function to the patient; and an external jacket surrounding said core, said jacket being formed from a thermoplastic or hydrogel, said jacket being free of said cells projecting externally therefrom, said jacket being biocompatible and having a molecular weight cutoff permitting passage of molecules between the patient and the core through said jacket to provide said biologically active product of function.

CAS INDEXING IS AVAILABLE FOR THIS PATENT. ACCESSION NUMBER: 1998:101409 USPATFULL TITLE:

Implantable biocompatible immunoisolatory vehicle for

INVENTOR (S):

delivery of selected therapeutic products Dionne, Keith E., Rehoboth, MA, United States Emerich, Dwaine F., Providence, RI, United States Hoffman, Diane, Cambridge, MA, United States Sanberg, Paul R., Spring Hill, FL, United States Christenson, Lisa, New Haven, CT, United States Hegre, Orion D., Green Valley, AZ, United States Scharp, David W., St. Louis, MO, United States Lacy, Paul E., Webster Grove, MO, United States Aebischer, Patrick, Lutry, Switzerland Vasooncellos, Alfred V., Cranston, RI, United States Lysaght, Michael J., Greenwich, RI, United States

PATENT ASSIGNEE(S):

Gentile, Frank T., Warwich, RI, United States Brown University Research Foundation, United States

(U.S. corporation)

KIND DATE NUMBER ------

PATENT INFORMATION: APPLICATION INFO .:

US 1995-449524 Division 19980825 19950524 (8)

RELATED APPLN. INFO.:

Division of Ser. No. US 1994-179151, filed on 10 Jan 1994 which is a continuation-in-part of Ser. No. US 1991-692403, filed on 25 Apr 1991, now abandoned

DOCUMENT TYPE: FILE SEGMENT: PRIMARY EXAMINER:

Utility Granted Bawa, Raj

LEGAL REPRESENTATIVE: Elrifi, Ivor R., Levin, Mintz

NUMBER OF CLAIMS: EXEMPLARY CLAIM:

33

NUMBER OF DRAWINGS:

12 Drawing Figure(s); 9 Drawing Page(s)

LINE COUNT: 3901

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 17 OF 17 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN

TI Methods for increasing the efficiency of recombinant AAV product.

AB The present invention relates to methods and compositions for increasing the production of high titre stocks of recombinant AAV (rAAV) through regulation of expression of the AAV REP and CAP proteins. The methods and compositions of the invention are based on the observation that the low level expression of the AAV REP protein increases the production of AAV viral capsid protein and efficiency of packaging resulting in production of higher titre recombinant viral stocks. The invention encompasses recombinant AAV vectors that direct the expression of AAV REP and CAP proteins and the use of such vectors for the production of novel stable cell lines capable of generating high titre rAAV vectors. The invention provides methods for regulating the expression of the AAV REP gene at the transcriptional and post-translational level. The methods and compositions of the invention can be used to produce high titre stocks of rAAV which can be used in gene therapy for the purpose of transferring genetic information into appropriate host cells for the management and correction of human diseases including inherited and acquired disorders.

ACCESSION NUMBER: 2003:227284 BIOSIS DOCUMENT NUMBER: PREV200300227284

TITLE: Methods for increasing the efficiency of recombinant AAV product.

Samulski, Richard Jude [Inventor, Reprint Author]; Xiao, AUTHOR(S):

Xiao [Inventor]; Snyder, Richard [Inventor] CORPORATE SOURCE: Wexford, PA, USA

ASSIGNEE: Cell Genesys, Inc.; The University of North Carolina at Chapel Hill

PATENT INFORMATION: US 6548286 April 15, 2003

Official Gazette of the United States Patent and Trademark SOURCE:

```
Office Patents, (Apr. 15, 2003) Vol. 1269, No. 3. http://www.uspto.gov/web/menu/patdata.html. e-file. ISSN: 0098-1133 (ISSN print).
```

DOCUMENT TYPE: Patent LANGUAGE: English

ENTRY DATE:

Entered STN: 7 May 2003 Last Updated on STN: 7 May 2003

| => e
E1
E2
E3
E4
E5
E6
E7
E8
E9
E10
E11 | cho, M/ | 1
1 | CHO ZUITO/AU CHO ZUIZEN/AU CHO, M/AU CHOA/AU CHOA A J O/AU CHOA A K/AU CHOA A K/AU CHOA B K H/AU CHOA B H G/AU CHOA C/AU CHOA C/AU CHOA C C/AU CHOA C G/AU |
|---|---------|--------|---|
| => e
E1
E2
E3
E4
E5
E6
E7
E8
E9
E10
E11
E12 | | 1
1 | CHAN ZUY KHUONG/AU CHAN ZYU KHUONG/AU CHANA X/AU CHANA AU CHANA A K/AU CHANA A K/AU CHANA A S/AU CHANA ANTONIA/AU CHANA ANTONIA/AU CHANA ANTONIA/AU CHANA CHANA C/AU CHANA C/AU |
| => e
E1
E2
E3
E4
E5
E6
B7
B8
E9
E10
E11
E12 | kelsey, | 6
1 | KELSEY Z/AU KELSEY ZOE/AU KELSEY W/AU KELSEYFRY I/AU KELSEYGC/AU KELSH D J/AU KELSH DENNIS J/AU KELSH DENNIS JOSEPH/AU KELSH DENNIS J/AU KELSH H K/AU KELSH J M/AU KELSH J M/AU |
| => e
E1
E2
E3
E4
E5
E6
E7
E8
E9
E10
E11
E12 | yee, H/ | 1
1 | YEE Z Z/AU YEE ZHON ZHUN/AU YEE, H/AU YEEBIYO Y/AU YEEBRADBURY C/AU YEEBRADBURY C M/AU YEECHAUNG S/AU YEECHAUNG S/AU YEECHONG H/AU YEED H/AU YEED H/AU YEEDA DAVID/AU YEEDA MASAYUKI/AU |